WE CLAIM:

1.   A method for processing a notification having a tag value, comprising:

    (a)   receiving the notification;

    (b)   determining a synchronization state; and

    (c)   processing the notification based on the synchronization state.

2.   The method of Claim 1, wherein determining a synchronization state, further comprises:

    (a)   setting a synchronization currently in process state when a synchronization is in process; otherwise

    (b)   setting a synchronization currently not in process state.

3.   The method of Claim 2, wherein processing the notification based on the synchronization state, further comprises determining when the synchronization state is set to a state of no synchronization currently in process, and when:

    (a)   processing the notification when the tagged value is current with respect to the current synchronization checkpoint value;

    (b)   discarding the notification when the tagged value is stale with respect to the current synchronization checkpoint value; and

    (c)   handling the notification when the tagged value is out-of-date with respect to the current synchronization value.

4.   The method of Claim 3, wherein handling the notification when the tagged value is out-of-date with respect to the current synchronization value, further comprises determining if the tagged value corresponds to a lost request key, and if so processing the notification, otherwise discarding the notification.

5.   The method of Claim 2, wherein processing the notification based on the synchronization state, further comprises determining when the synchronization state currently in process is set, and when:

(a)   queuing the notification when the tagged value is current with respect to the desired synchronization level;

(b)   discarding the notification when the tagged value is stale with respect to the desired synchronization value or out-of-date with respect to the desired synchronization level and corresponds to the sync level of a lost sync request; and

(c)   handling the notification when the tagged value is out-of-date with respect to the desired synchronization level.

6.   The method of Claim 5, further comprising processing the notification when the synchronization not currently in process state is set.

7.   A computer-readable medium having computer-executable instructions for processing a notification, comprising:

(a)   receiving the notification;

(b)   determining a synchronization state; and

(c)   processing the notification based on the synchronization state.

8.   The computer-readable medium of Claim 7, wherein determining a synchronization state, further comprises:

(a)   setting a synchronization currently in process state when a synchronization is in process; otherwise

(b)   setting a synchronization currently not in process state.

9.   The computer-readable medium of Claim 8, wherein processing the notification based on the synchronization state, further comprises determining when the synchronization state is set to a state of no synchronization currently in process, and when:

(a)   processing the notification when a tagged value associated with the notification is current with respect to the current synchronization checkpoint value;

(b)   discarding the notification when the tagged value is stale with respect to the current synchronization checkpoint value or out-of-date with respect to

the desired synchronization level and current with respect to the sync level of a lost sync request; and

(c)   handling the notification when the tagged value is out-of-date with respect to the current synchronization value.

10.   The computer-readable medium of Claim 9, wherein handling the notification when the tagged value out-of-date with respect to the current synchronization value, further comprises determining if the tagged value is current with respect to the lost request key, and if so processing the notification, otherwise discarding the notification.

11.   The computer-readable medium of Claim 8, wherein processing the notification based on the synchronization state, further comprises determining when the synchronization state currently in process is set, and if so:

(a)   queuing the notification when the tagged value is current with respect to the desired synchronization level;

(b)   discarding the notification when the tagged value is stale with respect to the desired synchronization value or out-of-date with respect to the desired synchronization level and current with respect to the sync level of a lost sync request; and

(c)   handling the notification when the tagged value is out-of-date with respect to the desired synchronization level.

12.   The computer-readable medium of Claim 11, further comprising processing the notification when the synchronization not currently in process state is set.

13.   A system for synchronizing data, comprising:

(a)   a processor and a computer-readable medium;

(b)   an operating environment stored on the computer-readable medium and executing on the processor;

(c)   a communication connection device operating under the control of the operating environment; and

(d)   a notification device operating under the control of the operating environment and operative to perform actions, including:

(i)   receiving the notification having a tagged value;

(ii)   setting a synchronization currently in process state when a synchronization is currently in process, otherwise setting a synchronization currently not in process state; and

(iii)   processing the notification based on the synchronization state.

14.   The system of Claim 13, wherein processing the notification based on the synchronization state, further comprises determining when the synchronization state is set to the synchronization currently not in process state, and when:

(a)   processing the notification when the tagged value is current with respect to the current synchronization checkpoint value;

(b)   discarding the notification when the tagged value is stale with respect to the current synchronization checkpoint value or out-of-date with respect to the desired synchronization level and current with the lost sync request; and

(c)   handling the notification when the tagged value is out-of-date with respect to the current synchronization value.

15.   The system of Claim 14, wherein handling the notification when the tagged value is out-of-date with respect to the current synchronization value, further comprises determining if the tagged value is current with respect to a lost request key, and if so, processing the notification, otherwise discarding the notification.

16.   The system of Claim 15, wherein processing the notification based on the synchronization state, further comprises determining when the synchronization state is set to the synchronization currently in process state, and when:

(a)   queuing the notification when the tagged value is current with respect to desired synchronization level;

(b)   discarding the notification when the tagged value is stale with respect to the desired synchronization value; and

(c)   handling the notification when the tagged value is out-of-date with respect to the desired synchronization level.

17.   The system of Claim 16, further comprising processing the notification when the synchronization state is set to synchronization currently not in process state.